RAW SEQUENCE LISTING   DATE: 01/23/2002
PATENT APPLICATION: US/10/038,694   TIME: 19:03:07

        Input Set : A:\07083.0008U5.SEQ.TXT
        Output Set: N:\CRF3\01232002\J038694.raw

ENTERED

```
 4 <110> APPLICANT: Dixon, Eric
 5         Hutchins, Jeff T.
 6         Kuettner, Klaus E.
 7         Schmid, Thomas M.
 8         Schumacher, Barbara L.
 9         Su, Jui-Lan
12 <120> TITLE OF INVENTION: SUPERFICIAL ZONE PROTEIN AND METHODS OF
13         MAKING AND USING SAME
16 <130> FILE REFERENCE: 07083.0008U5
18 <140> CURRENT APPLICATION NUMBER: US/10/038,694
18 <141> CURRENT FILING DATE: 2001-12-31
18 <150> PRIOR APPLICATION NUMBER: 60/258,920
19 <151> PRIOR FILING DATE: 2000-12-29
21 <160> NUMBER OF SEQ ID NOS: 11
23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 6
27 <212> TYPE: PRT
28 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
32        synthetic construct
34 <400> SEQUENCE: 1
35 Asp Glu Ala Gly Ser Gly
36 1               5
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 188
40 <212> TYPE: PRT
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
45        synthetic construct
47 <400> SEQUENCE: 2
48 Met Ala Trp Lys Thr Leu Pro Ile Tyr Leu Leu Leu Leu Ser Val
49 1               5                   10                  15
50 Phe Val Ile Gln Gln Val Ser Ser Gln Asp Leu Ser Ser Cys Ala Gly
51             20                  25                  30
52 Arg Cys Gly Glu Gly Tyr Ser Arg Asp Ala Thr Cys Asn Cys Asp Tyr
53         35                  40                  45
54 Asn Cys Gln His Tyr Met Glu Cys Cys Pro Asp Phe Lys Arg Val Cys
55     50                  55                  60
56 Thr Ala Glu Leu Ser Cys Lys Gly Arg Cys Phe Glu Ser Phe Glu Arg
57 65                  70                  75                  80
```

C--> 18 marked in left margin beside line 18 `<140>`
C--> 18 marked in left margin beside line 18 `<141>`

RAW SEQUENCE LISTING   DATE: 01/23/2002
PATENT APPLICATION: US/10/038,694   TIME: 19:03:07

          Input Set : A:\07083.0008U5.SEQ.TXT
          Output Set: N:\CRF3\01232002\J038694.raw

```
58 Gly Arg Glu Cys Asp Cys Asp Ala Gln Cys Lys Lys Tyr Asp Lys Cys
59             85              90              95
60 Cys Pro Asp Tyr Glu Ser Phe Cys Ala Glu Val Lys Asp Asn Lys Lys
61             100             105             110
62 Asn Arg Thr Lys Lys Lys Pro Thr Pro Lys Pro Pro Val Val Asp Glu
63             115             120             125
64 Ala Gly Ser Gly Leu Asp Asn Gly Asp Phe Lys Val Thr Thr Pro Asp
65         130             135             140
66 Thr Ser Thr Thr Gln His Asn Lys Val Ser Thr Ser Pro Lys Ile Thr
67 145             150             155             160
68 Thr Ala Lys Pro Ile Asn Pro Arg Pro Gln Ser Ser Pro Asn Ser Asp
69             165             170             175
70 Thr Ser Lys Glu Thr Ser Leu Thr Val Asn Lys Glu
71             180             185
73 <210> SEQ ID NO: 3
74 <211> LENGTH: 538
75 <212> TYPE: PRT
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
80         synthetic construct
82 <400> SEQUENCE: 3
83 Pro Thr Thr Ile His Lys Ser Pro Asp Glu Ser Thr Pro Glu Leu Ser
84  1               5               10              15
85 Ala Glu Pro Thr Pro Lys Ala Leu Glu Asn Ser Pro Lys Glu Pro Gly
86             20              25              30
87 Val Pro Thr Thr Lys Thr Pro Ala Ala Thr Lys Pro Glu Met Thr Thr
88         35              40              45
89 Thr Ala Lys Asp Lys Thr Thr Glu Arg Asp Leu Arg Thr Thr Pro Glu
90     50              55              60
91 Thr Thr Thr Ala Ala Pro Lys Met Thr Lys Glu Thr Ala Thr Thr Thr
92 65              70              75              80
93 Glu Lys Thr Thr Glu Ser Lys Ile Thr Ala Thr Thr Thr Gln Val Thr
94             85              90              95
95 Ser Thr Thr Thr Gln Asp Thr Thr Pro Phe Lys Ile Thr Thr Leu Lys
96             100             105             110
97 Thr Thr Leu Ala Pro Lys Val Thr Thr Thr Lys Lys Thr Ile Thr Thr
98         115             120             125
99 Thr Glu Ile Met Asn Lys Pro Glu Glu Thr Ala Lys Pro Lys Asp Arg
100     130             135             140
101 Ala Thr Asn Ser Lys Ala Thr Thr Pro Lys Pro Gln Lys Pro Thr Lys
102 145             150             155             160
103 Ala Pro Lys Lys Pro Thr Ser Thr Lys Lys Pro Lys Thr Met Pro Arg
104             165             170             175
105 Val Arg Lys Pro Lys Thr Thr Pro Thr Pro Arg Lys Met Thr Ser Thr
106             180             185             190
107 Met Pro Glu Leu Asn Pro Thr Ser Arg Ile Ala Glu Ala Met Leu Gln
108             195             200             205
109 Thr Thr Thr Arg Pro Asn Gln Thr Pro Asn Ser Lys Leu Val Glu Val
```

RAW SEQUENCE LISTING   DATE: 01/23/2002
PATENT APPLICATION: US/10/038,694   TIME: 19:03:07

Input Set : A:\07083.0008U5.SEQ.TXT
Output Set: N:\CRF3\01232002\J038694.raw

```
110     210                   215                  220
111 Asn Pro Lys Ser Glu Asp Ala Gly Gly Ala Glu Gly Glu Thr Pro His
112 225                   230                  235                  240
113 Met Leu Leu Arg Pro His Val Phe Met Pro Glu Val Thr Pro Asp Met
114                   245                  250                  255
115 Asp Tyr Leu Pro Arg Val Pro Asn Gln Gly Ile Ile Ile Asn Pro Met
116                   260                  265                  270
117 Leu Ser Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro Val Asp Gly Leu
118         275                   280                   285
119 Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg Gly His Tyr Phe
120         290                   295                  300
121 Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala Arg Arg Ile Thr
122 305                   310                  315                  320
123 Glu Val Trp Gly Ile Pro Ser Pro Ile Asp Thr Val Phe Thr Arg Cys
124                   325                  330                  335
125 Asn Cys Glu Gly Lys Thr Phe Phe Phe Lys Asp Ser Gln Tyr Trp Arg
126                   340                  345                  350
127 Phe Thr Asn Asp Ile Lys Asp Ala Gly Tyr Pro Lys Pro Ile Phe Lys
128         355                   360                  365
129 Gly Phe Gly Gly Leu Thr Gly Gln Ile Val Ala Ala Leu Ser Thr Ala
130         370                   375                  380
131 Lys Tyr Lys Asn Trp Pro Glu Ser Val Tyr Phe Phe Lys Arg Gly Gly
132 385                   390                  395                  400
133 Ser Ile Gln Gln Tyr Ile Tyr Lys Gln Glu Pro Val Gln Lys Cys Pro
134                   405                  410                  415
135 Gly Arg Arg Pro Ala Leu Asn Tyr Pro Val Tyr Gly Glu Met Thr Gln
136                   420                  425                  430
137 Val Arg Arg Arg Arg Phe Glu Arg Ala Ile Gly Pro Ser Gln Thr His
138         435                   440                  445
139 Thr Ile Arg Ile Gln Tyr Ser Pro Ala Arg Leu Ala Tyr Gln Asp Lys
140         450                   455                  460
141 Gly Val Leu His Asn Glu Val Lys Val Ser Ile Leu Trp Arg Gly Leu
142 465                   470                  475                  480
143 Pro Asn Val Val Thr Ser Ala Ile Ser Leu Pro Asn Ile Arg Lys Pro
144                   485                  490                  495
145 Asp Gly Tyr Asp Tyr Tyr Ala Phe Ser Lys Asp Gln Tyr Tyr Asn Ile
146                   500                  505                  510
147 Asp Val Pro Ser Arg Thr Ala Arg Ala Ile Thr Thr Arg Ser Gly Gln
148         515                   520                  525
149 Thr Leu Ser Lys Val Trp Tyr Asn Cys Pro
150         530                   535
```

152 <210> SEQ ID NO: 4
153 <211> LENGTH: 3
154 <212> TYPE: PRT
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
159   synthetic construct
161 <221> NAME/KEY: VARIANT

RAW SEQUENCE LISTING   DATE: 01/23/2002
PATENT APPLICATION: US/10/038,694   TIME: 19:03:07

Input Set : A:\07083.0008U5.SEQ.TXT
Output Set: N:\CRF3\01232002\J038694.raw

162 <222> LOCATION: 2
163 <223> OTHER INFORMATION: Xaa is any amino acid except Pro
165 <221> NAME/KEY: VARIANT
166 <222> LOCATION: 3
167 <223> OTHER INFORMATION: Xaa is either Thr or Ser
169 <400> SEQUENCE: 4
170 Asn Xaa Xaa
171 1
173 <210> SEQ ID NO: 5
174 <211> LENGTH: 488
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
180   synthetic construct
182 <400> SEQUENCE: 5
183 atgcatgaaa cattccatta ctgtgttctg tgttgtttct gatcacaatt tatccaaatt   60
184 atcagcgtga ggagagtggg agggatttag gatccactga acgtgttaaa cgtcacatac   120
185 tgggtgtgcc tgtttaagga gctgactcgg gcttccgtaa ggcgcgcttg atcctcggag   180
186 ggggggggtgg acgcgcgcca agtagaatat acagtgtgtc cgttagaggt ttctgtgcag   240
187 aagtaaaaga taacaagaag aacagaacta aaaagaaacc tacccccaaa ccaccagttg   300
188 tagatgaagc tggaagtgga ttggacaatg gtgacttcaa ggtcacaact cctgacacgt   360
189 ctaccaccca acacaataaa gtcagcacat ctcccaagat cacaacagca aaaccaataa   420
190 atcccagacc ccagtcttca cctaattctg atacatctaa agagacgtct ttgacagtga   480
191 ataaagag   488
193 <210> SEQ ID NO: 6
194 <211> LENGTH: 1620
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
200   synthetic construct
202 <400> SEQUENCE: 6
203 cctaccacta tccacaaaag ccctgatgaa tcaactcctg agctttctgc agaacccaca   60
204 ccaaaagctc ttgaaaacag tcccaaggaa cctggtgtac ctacaactaa gactcctgca   120
205 gcgactaaac ctgaaatgac tacaacagct aaagacaaga caacagaaag agacttacgt   180
206 actacacctg aaactacaac tgctgcacct aagatgacaa aagagacagc aactacaaca   240
207 gaaaaaacta ccgaatccaa aataacagct acaaccacac aagtaacatc taccacaact   300
208 caagatacca caccattcaa aattactact cttaaaacaa ctactcttgc acccaaagta   360
209 actacaacaa aaaagacaat tactaccact gagattatga acaaacctga gaaacagct   420
210 aaaccaaaag acagagctac taattctaaa gcgacaactc ctaaacctca aaagccaacc   480
211 aaagcacccca aaaaacccac ttctaccaaa aagccaaaaa caatgcctag agtgagaaaa   540
212 ccaaagacga caccaactcc ccgcaagatg acatcaacaa tgccagaatt gaaccctacc   600
213 tcaagaatag cagaagccat gctccaaacc accaccagac ctaaccaaac tccaaactcc   660
214 aaactagttg aagtaaatcc aaagagtgaa gatgcaggtg gtgctgaagg agaaacacct   720
215 catatgcttc tcaggcccca tgtgttcatg cctgaagtta ctcccgacat ggattactta   780
216 ccgagagtac ccaatcaagg cattatcatc aatcccatgc tttccgatga gaccaatata   840
217 tgcaatggta agccagtaga tggactgact actttgcgca atgggacatt agttgcattc   900
218 cgaggtcatt atttctggat gctaagtcca ttcagtccac catctccagc tcgcagaatt   960

```
219 actgaagttt ggggtattcc ttcccccatt gatactgttt ttactaggtg caactgtgaa       1020
220 ggaaaaactt tcttctttaa ggattctcag tactggcgtt ttaccaatga tataaaagat       1080
221 gcagggtacc ccaaaccaat tttcaaagga tttggaggac taactggaca aatagtggca       1140
222 gcgctttcaa cagctaaata taagaactgg cctgaatctg tgtatttttt caagagaggt       1200
223 ggcagcattc agcagtatat ttataaacag gaacctgtac agaagtgccc tggaagaagg       1260
224 cctgctctaa attatccagt gtatggagaa atgacacagg ttaggagacg tcgctttgaa       1320
225 cgtgctatag gaccttctca aacacacacc atcagaattc aatattcacc tgccagactg       1380
226 gcttatcaag acaaaggtgt ccttcataat gaagttaaag tgagtatact gtggagagga       1440
227 cttccaaatg tggttacctc agctatatca ctgcccaaca tcagaaaacc tgacggctat       1500
228 gattactatg cctttctaa agatcaatac tataacattg atgtgcctag tagaacagca       1560
229 agagcaatta ctactcgttc tgggcagacc ttatccaaag tctggtacaa ctgtccttag       1620
231 <210> SEQ ID NO: 7
232 <211> LENGTH: 24
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
238      synthetic construct
240 <400> SEQUENCE: 7
241 atggcatgga aaacacttcc catt                                                24
243 <210> SEQ ID NO: 8
244 <211> LENGTH: 24
245 <212> TYPE: DNA
246 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
250      synthetic construct
252 <400> SEQUENCE: 8
253 ctaaggacag ttgtaccaga cttt                                                24
255 <210> SEQ ID NO: 9
256 <211> LENGTH: 4
257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
262      synthetic construct
264 <400> SEQUENCE: 9
265 Phe Ala Cys Glu
266  1
268 <210> SEQ ID NO: 10
269 <211> LENGTH: 8
270 <212> TYPE: PRT
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
275      synthetic construct
277 <400> SEQUENCE: 10
278 Val Lys Asp Asn Lys Lys Asn Arg
279  1               5
```

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 01/23/2002
PATENT APPLICATION: US/10/038,694 TIME: 19:03:08

Input Set : A:\07083.0008U5.SEQ.TXT
Output Set: N:\CRF3\01232002\J038694.raw

L:18 M:270 C: Current Application Number differs, Replaced Current Application No
L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11